



SECTION 711

PROTECTIVE COATINGS FOR EXPOSED CONCRETE SURFACES

711.1 Description. This work shall consist of the surface preparation and application of protective coatings for sealing and protecting exposed concrete elements. The locations and elevations of the protective coatings shall be as shown on the bridge plans. The work involving temporary coating on weathering steel bridges shall also include the removal of the temporary coating.

711.2 Material. All material shall be in accordance with Division 1000, Material Details, and specifically as follows:

Item	Section
Protective Coating Material	1059

711.3 Construction Requirements.

711.3.1 Protective Coating - Concrete Bents and Piers (Urethane). This protective coating shall consist of a modified urethane or polyurethane elastomer. New concrete shall cure a minimum of 28 days prior to application of the protective coating. The coating shall be applied to dry surfaces. The surface preparation and application shall be in accordance with the manufacturer's recommendations. The coating shall be applied to obtain a minimum dry film thickness of 40 mils (1 mm). Any unevenly applied film that causes ponding of water shall be given additional coats as directed by the engineer.

711.3.2 Protective Coating - Concrete Bents and Piers (Epoxy). This protective coating shall consist of a two-component, modified polyamide converted epoxy, clear or gray in color. New concrete shall cure a minimum of 28 days prior to application of the protective coating. The coating shall be applied to dry surfaces. The surface preparation and application shall be in accordance with the manufacturer's recommendations. The coating shall be applied to obtain a minimum dry film thickness of 6 mils (150 μ m).

711.3.3 Concrete and Masonry Protection System. This protective coating shall consist of a clear penetrating siloxane or silane based sealer. The surface preparation and application shall be in accordance with the manufacturer's recommendations. Field approval of the proposed material will be in accordance with Sec 1059.

711.3.4 Sacrificial Graffiti Protection System. This system shall consist of a clear coating that can be removed with a hot water wash. The surface preparation and application shall be in accordance with the manufacturer's recommendations. Field approval of the proposed material will be in accordance with Sec 1059.

711.3.5 Temporary Coating - Concrete Bents and Piers (Weathering Steel) . This protective coating shall consist of a clear temporary coating applied to the concrete substructure for protection against staining from weathering steel girders during initial weathering. The surface preparation and application shall be in accordance with the manufacturer's recommendations. The concrete substructure shall be cured a minimum of 14 days prior to application, unless otherwise specified by the manufacturer. The coating shall be applied to the concrete substructure before the erection of structural steel. The temporary



**PROTECTIVE COATING MATERIAL
FIELD SECTION 1059 TABLE 1
QUALIFIED PROTECTIVE COATING – CONCRETE BENTS AND PIERS
(URETHANE)
(1059PCCBPR)**

<u>Brand Name</u>	<u>Manufacturer</u>
C.I.M. 1000 (Trowel Grade) (5/01)	C.I.M. Industries, Inc. 94 Grove Street Peterborough, NH 03458
Enviroplastic PA Polyaspartic (9/07)	Sherwin-Williams 15484 College Blvd. Lenexa, KS 66219
Futura-Flex 520 HB (10/95)	Futura Coatings, Inc. 9200 Latty Ave. Hazelwood, MO 63042
Futura-Flex 521 HB	Futura Coatings, Inc. 9200 Latty Ave. Hazelwood, MO 63042
Mark 68.1	Poly-Carb Co. 33095 Bainbridge Rd. Cleveland, OH 44139
Tapco H-550	Pecora Corporation 165 Wambold Rd. Harleysville, PA 19438
Vulkem 925	MAMECO International, Inc. 4475 E. 175th St. Cleveland, OH 44128





**PROTECTIVE COATING MATERIAL
FIELD SECTION 1059 TABLE 2
QUALIFIED PROTECTIVE COATING – CONCRETE BENTS AND PIERS
(EPOXY)
(1059PCECBP)**

Brand Name

Manufacturer

Horseysset.WD / Water Dispersed Epoxy

Watson/Bowman - Acme
95 Pine View Drive
Amherst, NY 14228

Carboguard 954 Concrete Coating
(10/95)

Carboline Co.
350 Hanley Industrial Ct.
St. Louis, MO 63144

Pilgrim Plastic

Pilgrim Permocoat, Inc.
402 S 22nd Street.
Tampa, FL 33605

Macropoxy 646 Fast Cure

The Sherwin-Williams Company
10440 E. Northwest Highway
Dallas, TX 75238

